



## Gulf of Mexico Harmful Algal Bloom Bulletin

10 August 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: August 7, 2006

### Conditions Report

A harmful algal bloom has been identified from southern Sarasota to northern Collier County. In southern Sarasota and Charlotte Counties, patchy moderate to high impacts are possible today through Sunday and patchy very low to low impacts are possible for Monday. In northern Lee County, patchy low to moderate impacts are possible today through Sunday and followed by patchy very low impacts on Monday. No impacts are expected for southern Lee County. In northern Collier County, patchy very low to low impacts are possible today through Sunday and patchy none to very low impacts are possible on Monday. Reports of dead fish and discolored water are possible.

### Analysis

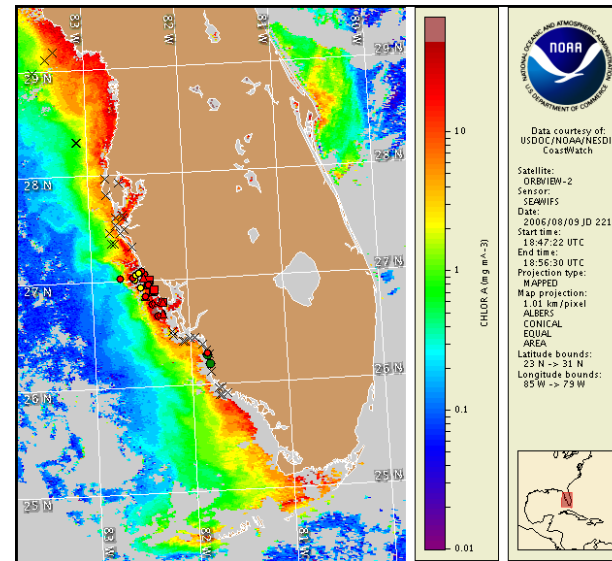
A harmful algal bloom persists from southern Sarasota County to northern Collier County. Imagery shows a region of high chlorophyll levels ( $>20 \mu\text{g/L}$ ) extending from as far north as  $27^{\circ}22'48''\text{N}$ ,  $82^{\circ}41'23''\text{W}$  to  $26^{\circ}38'3''\text{N}$ ,  $82^{\circ}16'49''\text{W}$ . This region contains three patches of very high chlorophyll levels ( $>30 \mu\text{g/L}$ ), each is centered at  $27^{\circ}18'53''\text{N}$ ,  $82^{\circ}39'8''\text{W}$ ,  $27^{\circ}3'18''\text{N}$ ,  $82^{\circ}32'35''\text{W}$ , and  $26^{\circ}43'12''\text{N}$ ,  $82^{\circ}22'2''\text{W}$ . Samples confirm the continued presence of *K. brevis* from southern Sarasota to northern Lee Counties at low to medium concentrations (FWRI; 8/7). A massive *Trichodesmium erythraeum* bloom has been noted in the Venice area. Fish kills have also been reported (FWRI; 8/8). Continued sampling in these regions is recommended. Cloudy imagery over Collier County limits analysis. *K. brevis* was found at very low concentrations in northern Collier and a new sample collected at Goodland in southern Collier contains very low concentrations (FWRI; 8/7). Since the last bulletin, chlorophyll levels have decreased in the Pinellas National Wildlife Refuges. Recent samples taken south of this region indicate no *K. brevis* (FWRI; 8/8); however, other species have been found. No further reports of discolored water or air quality concerns have been received.

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

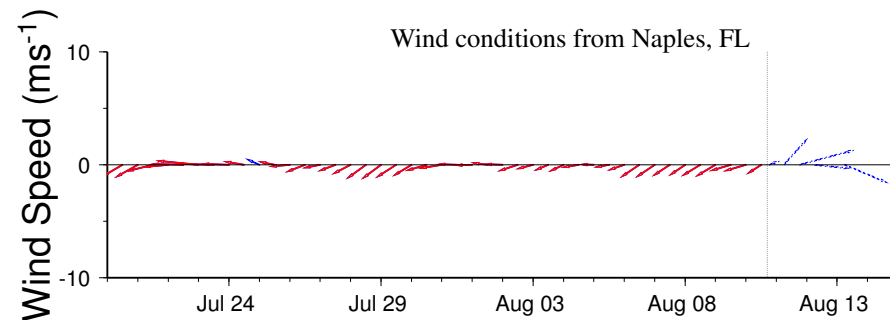
1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

Onshore winds today through Sunday will increase impacts and sustain the bloom at the coast with the possibility of slight southwesterly transport.

~Urizar, Fenstermacher



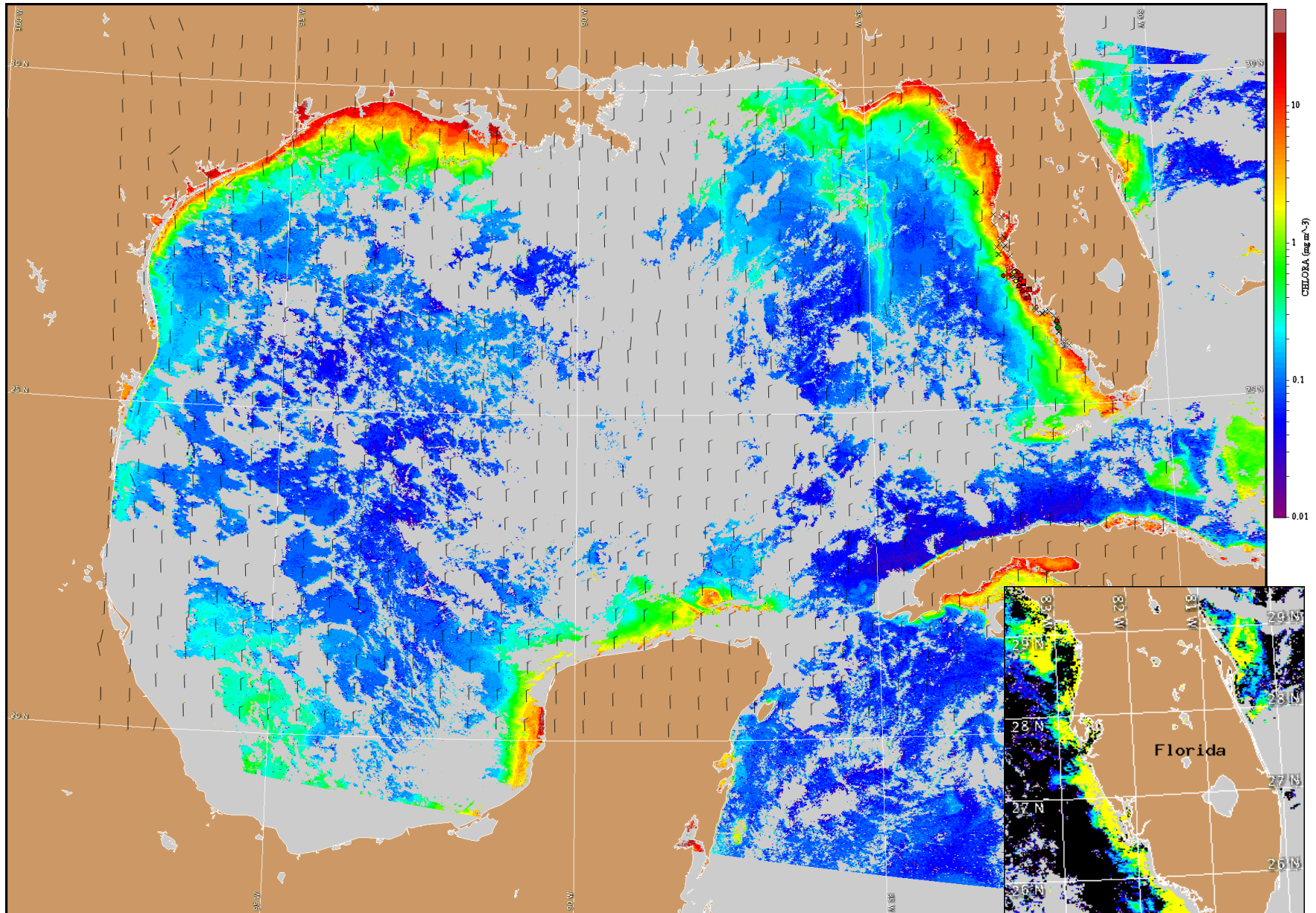
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from July 31-August 4 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Charlotte, Lee, and Collier Counties: West winds today at 5-10 knots (3-5 m/s) becoming northwest tonight at 5 knots (3 m/s). Weak variable winds (less than 5 kts, 3 m/s) Friday and Saturday with southwesterlies in the afternoons. West winds Saturday night and Sunday at 5-10 knots (3-5 m/s) and northwest winds on Monday (10 kts, 5 m/s).

Sarasota County: West winds today and tomorrow becoming southwest Friday night (10 kts, 5 m/s). West winds at 10-15 knots (5-8 m/s) Saturday and Sunday becoming northwest at 10 knots (5 m/s) on Monday.



Satellite chlorophyll image and forecast winds for August 11, 2006 06Z with cell concentration sampling data from July 31-August 4 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Venice Pier, FL

